

Notice of Allowability

Application No.

09/865,046

Examiner

Andrew Schechter

Applicant(s)

HANAKAWA ET AL.

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 22 September 2003.
2. ☒ The allowed claim(s) is/are 1-20 and 22-35.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1 ☐ Notice of References Cited (PTO-892)
- 3 ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 5 ☒ Information Disclosure Statements (PTO-1449), Paper No. 9/22/03
- 7 ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 2 ☐ Notice of Informal Patent Application (PTO-152)
- 4 ☐ Interview Summary (PTO-413), Paper No. _____
- 6 ☐ Examiner's Amendment/Comment
- 8 ☒ Examiner's Statement of Reasons for Allowance
- 9 ☐ Other

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-20 and 22-35 are allowed.
2. The following is an examiner's statement of reasons for allowance:

The prior art [as discussed in the previous Office Action] discloses liquid crystal devices with multi-layer electrodes including an underlying film, a silver film, and a metal oxide film. The prior art does not disclose a liquid crystal device comprising an underlying film, a reflective, conductive, silver-containing film on it, and a metal oxide film on that which is patterned so that an edge portion comes into contact with the underlying film. The prior art [such as *Harano*, U.S. Patent No. 6,317,185] discloses liquid crystal displays with such three-layer electrodes having the top layer coming into contact with the bottom layer, but does not disclose the middle layer containing silver. Independent claims 1, 5, 14, 22, 23, 24, 30, and 32 are therefore allowed, as are their dependent claims 2-4, 6-13, 15-17, 25, and 26.

Claim 18 has been amended to include the limitations of the previous dependent claim 21 which was indicated as having allowable subject matter. The prior art does not disclose the first substrate having first and second extending regions which do not overlap the second substrate, where the lead (underlying film – metal film – metal oxide film) is provided over both extending regions. (This is understood by the examiner to mean that at least one such lead is on both regions as shown in Figs. 8-10, rather than

the first region has such a lead and the second region has a different such lead.) Claim 18, and its dependent claims 19 and 20 are therefore allowed.

The prior art does not disclose an LCD comprising an underlying film, a silver-containing reflective conductive film formed on it, and a metal oxide film which is deposited on the metal film and patterned so that an edge portion of the metal oxide film contacts the underlying film. Claims 28 and 35 are therefore allowed. Claims 27, 29, and 31 recite an LCD with either a pixel electrode or a first lead comprising this laminated structure (and a metal film instead of reflective conductive film), so they are similarly allowed. Claims 33 and 34 recite an LCD comprising an underlying film, a reflective conductive film containing silver formed on the underlying film, and a first transparent electrode deposited on the reflective conductive film, comprising a metal oxide film patterned so that it protrudes from an edge of the reflective film and contacts the underlying film, so they are similarly allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

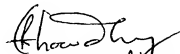
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Schechter whose telephone number is (703) 306-5801. The examiner can normally be reached on Monday - Friday, 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on (703) 305-3492. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Andrew Schechter
23 October 2003


T. Chowdhury
Primary Examiner